

**Thailand AERA 29th Quarterly Activities Report  
September - December 2006  
Accelerating Economic Recovery in Asia  
US Government Funded Program  
through the US Agency for International Development (USAID)**

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## **Executive Summary**

### **Business Advisory**

With the end of all other USAID-funded business advisory services completed by the end of the previous quarter, the sole remaining project was to assist ASEAN food exporters to improve their capacity to trade with three major markets: Japan, the US and China. The project website went online and the first seminar on the Japanese market was completed.

### **Borderless Action Against Microbes Project (BAAM)**

During this quarter, major activities implemented under the Borderless Action Against Microbes (BAAM) Program included work on both malaria and avian influenza. Key activities were meetings with donors to support collaboration on avian influenza, training support teams on the use of teacher guides for life-skills based education on avian influenza, conducting malaria drug quality testing, monitoring drug resistance, assessing past Thai malaria programs, developing GDA partnerships for avian and pandemic influenza and facilitating cross border cooperation on malaria and avian influenza.

### **Environmental Support Program**

The final activities of the two environmental programs funded by USAID took place in this quarter. The Sustainable Enterprise Initiative, intended to help Thai business schools incorporate environmental awareness and environmental management skills in their programs will conclude disbursements and provide a final report in the second quarter. The initiative's final activity was concluded on Dec. 7, 2006 when Thammasat University organized its 2<sup>nd</sup> industry advisory board meeting and presented 3 case studies and two research papers. More than 50 attendees from universities, government agencies and business sectors participated in the meeting.

The Enhanced Municipal Manager Training Program has developed materials and training programs to help municipal managers develop the processes and skills to better manage municipal environmental projects. The key Thai partner, King Prajadhipok's Institute (KPI), completed development of its citizen survey protocol and manual in the Thai language. This material is ready for use by working group members in Thai cities.



## **Business Advisory Center (BAC)**

### **Business Advisory Services**

All but one of the business advisory services provided under the AERA program were completed by the beginning of this quarter. Therefore the project descriptions and indicator tables for the completed projects are not provided in this report. Business advisory work begun with USAID funding, however, continues with funding from the Thai government, the World Bank, the Kenan Charitable Trust and private donors. This work includes labor standards auditing, business cluster facilitation, SME consulting, corporate social responsibility training, small business incubation, entrepreneurship training, and business plan training. The remaining USAID-funded business advisory activity is trade capacity building for packaged food producers in ASEAN.

### **Trade Capacity Building**

USAID approved a modification of the K.IAsia-USAID cooperative agreement in July to help promote the export of packaged food products from Thailand and other ASEAN countries to three major markets: the USA, Japan and China. The project, called “Building Trade Capacity in Southeast Asia: Exporting Asian Foods to Global Markets” focuses on increasing the export capability of ASEAN manufacturers and exporters of packaged ready-to-eat and ready-to-cook products, seasonings and ingredients. The project concentrates on overcoming the obstacles to exports to three key markets – Japan, the United States and China.

On October 15, the project’s website [www.aseanfoodexport.com](http://www.aseanfoodexport.com) was launched, initially as a portal for ASEAN packaged food exporters to learn about and register for the project’s activities. The website will be further developed as the project progresses, by adding a section for research and other information resources useful to ASEAN packaged food exporters.

On November 23, the project’s first seminar – how to meet Japanese safety, standards and labeling regulations – was held. Opened with a speech by USAID’s Skip Kissinger, the seminar was broken into three sections:

- 1) opportunities for exporting to Japan,
- 2) the mechanics of safety, standards and labeling and
- 3) practical steps to success in exporting.

The majority of speakers were Japanese executives from such organizations as Itochu Corp., Sumitomo (Thailand), S&B Foods, Mitsubishi (Thailand), JETRO and Ajinomoto Frozen Foods (Thailand). In addition, a panel of successful ASEAN exporters from the Philippines and Thailand provided overviews of their experiences and suggestions for other exporters to Japan. More than 70 participants attended the event (not counting speakers and Kenan staff) from Cambodia, Indonesia Malaysia,



Philippines, Singapore, and Thailand. More than 30 companies participated in a one-on-one clinic session with a speaker. This event will be followed by two more in the seminar & clinic series, one focusing on the United States (March 14, 2007) and the other on China (April 4, 2007).

The Japan seminar received good reviews with 40.91% of the 44 respondents rating conference materials as “good”, 45.45% as “very good”, 6.82% as “appropriate” and none as “poor”. According to ratings of individual sessions, no session received more than one respondent rating it as “poor”. For the one-on-one clinic sessions, 66% of respondents rated their session as “very good” or “good”. Approximately 91% of respondents said the conference met their expectations, and 56% plan to attend the U.S. seminar and 59% the China seminar.



## **Borderless Action Against Microbes Program (BAAM)**

The Borderless Action Against Microbes Program aims to strengthen national capacities and regional collaboration for effective surveillance, prevention and control of locally significant infectious diseases, including malaria and dengue fever, and emerging infection diseases such as potentially pandemic avian influenza. Strategic actions include development of replicable models of collaboration in trans-boundary infectious disease control including: monitoring and responding to the emergence and spread of resistance to antimicrobial medicines, counterfeit and substandard medicines, and sub-optimal public/private sector provider and consumer medicine use practices that contribute to antimicrobial resistance and treatment failures. In tandem with capacity building for measures undertaken by the public health system, BAAM supports health system reform to enable community action and empowerment through school life skills-based health education and participatory learning and action processes for a long-term effect on community health behaviors. During the reporting period from October through December 2006, activities implemented included the following:

### **Border Collaboration on Infectious Disease Control**

***Joint Action Programs on Infectious Disease Control in Border Areas:*** BAAM participated in a meeting of donors to consider support for implementation of activities in the Joint Action Programs for collaboration on avian and pandemic influenza (Thailand, Laos, Cambodia), and for joint activities for prevention and control of HIV/AIDS, TB, malaria and disease outbreak response along Thailand's borders with Cambodia and the Lao PDR. A set of core activities were selected and submitted in BAAM's workplan for USAID approval.

BAAM staff consulted with officials of the USAID Cambodia mission and the Thi Ministry of Public Health (RTG MoPH) regarding border collaboration on infectious disease control with Thailand.

### **Malaria**

***Malaria control strategy review:*** BAAM Coordinated with USAID/RDMA Infectious Disease Program and WHO Mekong Malaria Program to organize a regional partners strategy review workshop on malaria control, hosted by BAAM in Chiang Mai from November 7-8.

BAAM coordinated with the Royal Thai Government Bureau of Vector Borne Disease (MoPH) to organize a workshop to review successes in the Thailand malaria control program over the past 5 years and to identify strategic issues and recommended strategies for the next 5 years. BAAM sponsored this workshop in Chiang Mai from November 4-6.

***Sentinel site monitoring of anti-malarial drug resistance:*** BAAM continued to support the RTG Bureau of Vector-Borne Diseases in conducting therapeutic efficacy and in vitro sensitivity monitoring of the currently of the currently used front line anti-malarial drugs continued in 9 border provinces under the malaria sentinel surveillance drug resistance network initiative.

***Research and development of an affordable, reliable, locally-produced rapid test for malaria antigen:*** The Royal Thai Government National Institute of Health and the



Bureau of Vector Borne Disease (MoPH) provided 600 units of the prototype rapid diagnostic test for malaria to the Shoklo Malaria Research Unit to conduct independent testing of the quality through field-testing in Tak Province.

***Malaria Control in Tourism Areas Related to Burmese Migrant Laborers:*** BAAM organized consultations among officials of the Phuket Provincial Public Health Office, the Bureau of Vector-borne Disease, and USAID to obtain an overview of the epidemiological situation regarding malaria and dengue control in Phang Nga and Phuket Provinces to explore initiation of special malaria control activities in this tourism area that is now experiencing outbreaks related to Burmese migrant laborers.

BAAM staff participated in the ACTMalaria regional malaria symposium and the ADB meeting on malaria in ethnic minority communities in Manila, and the SMRU border malaria meeting.

### **Avian and Pandemic Influenza**

***Influenza Pandemic Preparedness Planning:*** Participated in the Lao PDR national-level influenza pandemic table top simulation exercise workshop organized by the National Avian and Human Influenza Coordinating Office.

BAAM staff participated in the first Burma border coordinating meeting on avian influenza organized by the International Rescue Committee (IRC) and consulted on how to proceed on coordination of avian influenza control and pandemic planning in refugee camps with provincial public health offices.

***School life skills-based education for infectious disease behavior development/change:*** BAAM Program Manager James Hopkins acted as training facilitator in a series of workshops to establish technical support teams for use of the teacher guides for life skills-based education on avian influenza developed with MOE-Thailand and supported by UNICEF. Teams were established in all 175 Education Service Area Offices. Trainees comprised 11 disease control officials from regional offices of disease control, 68 health officials from provincial public health offices, and 382 education supervisors.

BAAM Program Manager James Hopkins held consultations with Save the Children/US (Vietnam) and Enfants et Developpement (Vietnam) regarding collaboration on developing teachers' guides for a life skills-based approach to infectious disease prevention and control in schools. They will coordinate with UNICEF in Vietnam to find out their interest.

BAAM staff met with members of the CCSDPT Education Sub-Committee and UNICEF regarding adapting the teachers guides on AHI for use in refugee camps and schools for children of migrant workers from Burma.

***Coordination and networking:*** BAAM staff participated in monthly meetings of the Burma Border AI Task Force for coordination of response by international agencies and NGOs. BAAM staff also participated in the ADB 5<sup>th</sup> GMS Regional CDC Workshop in Phnom Penh

***Global Development Alliance Partnerships for Avian and Pandemic Influenza Prevention and Control:*** During this quarter, the AI team in Bangkok continued to work on securing subgrants to carry out avian influenza prevention and control activities. In October, a cooperative agreement between K.I.Asia and Agronomies & Veterinaires sans Frontieres (AVSF) to fund the "Strengthening the Capacity of Veterinarians and Poultry



Farmers to Control Avian Influenza Outbreaks in Viet Nam” project was signed. AVSF has commenced the project and it is going quite well. In addition to this funding, AVSF applied for and was awarded another USD 45,000 to expand the reach of the project. In addition to AVSF, Australian Foundation of the Peoples of Asia and the Pacific Limited (AFAP-VN) was awarded a grant of USD 49,377 for their project “Targeting Avian Influenza in Hoa Binh and Surrounding Provinces”. The agreement was approved on 28 December and will be signed as soon as possible. Catholic Relief Services was also awarded a grant through the GDA program for USD 77,029. The agreement is currently under review and is expected to be signed in early January 2007.

Influenza Thailand Foundation (IFT) and AgriSource Co Ltd were both awarded grants from the GDA program. K.I.Asia continues to work with both alliance groups to refine their proposals and budgets. Agreements are expected by February 2007.

The AI team in Bangkok met with Colgate-Palmolive and Kasetsart University as potential partners in the GDA project. Colgate is in the process of writing a proposal and will submit it to K.I.Asia by 15 January 2007. Kasetsart University is working on a project already and will consider writing a proposal for additional funding if needed. The AI Bangkok team has kept in touch with Delaware University as a potential partner for future GDA projects related to avian influenza.

### **Activities Planned for the Next Quarter**

Major activities planned for the next quarter from January through March 2007 include the following:

- Co-organizing with RTG MoPH a meeting to finalize the 2007 workplans for activities in the Joint Action Programs on avian and pandemic influenza (Thailand, Laos, Cambodia), and for joint activities for prevention and control of HIV/AIDS, TB, malaria and disease outbreak response along Thailand’s borders with Cambodia and the Lao PDR;
- Co-organizing with RTG MoPH a workshop on linking infectious disease epidemiological information and communication systems for coordinated surveillance and response;
- Monitoring anti-malarial drug resistance and drug quality in sentinel sites;
- Independent quality testing of the prototype rapid detection test for malaria antigen by the Shoklo Malaria Research Unit;
- Conducting consultations with the RTG MoPH Bureau of Vector-borne Disease to initiate a project to identify areas of high risk for malaria and develop special measures for activities in tourism areas in Phang Nga and Phuket Provinces experiencing outbreaks related to Burmese migrant laborers;
- Holding consultations with the Karen Education Department, the Karenni Education Department, and the Burmese Migrant Workers Education Committee and organize a workshop on development of teacher guides for life skills-based education on avian influenza for refugee camps and schools with migrant workers children;





- Assisting the Thai Ministry of Education to develop a manual and materials for village health volunteers on avian and pandemic influenza;
- Organizing an informal consultation workshop in Mae Hong Son Province to establish avian and pandemic influenza program coordination linkages between NGOs working in refugee camps and provincial public health, livestock, and Ministry of Interior officials;
- Providing technical assistance to the Thai Ministry of Education to develop a manual for school pandemic preparedness planning;
- Activities expected under the Global Development Alliance Partnerships for Avian and Pandemic Influenza Prevention and Control project are:
  - AFAP will sign and return the agreement. A transfer of funds and project initiation is expected in January 2007.
  - CRS will sign and return the agreement. A transfer of funds and project initiation is expected in January 2007.
  - IFT is expected to finalize their proposal and budget and sign an agreement in January 2007.
  - AgriSource is expected to finalize their proposal and budget and sign an agreement in January 2007.
  - Colgate will submit a proposal for funding from the GDA program.
  - Kessasart University will submit a proposal for funding from the GDA program.
  - AVSF will submit a modified proposal for the USD 45,000 it has been awarded and will sign the modified agreement.
  - BAAC will submit a proposal for funding from the GDA program. .

### **U.S. Pharmacopeia Drug Quality Information Project**

K.I.Asia provides staff and administrative support for a global USAID project being implemented by the U.S. Pharmacopeia. In this quarter the staff person working on this project in Thailand and neighboring countries undertook the following activities:

- Attended the follow-up meeting with development partners on the Cross-Border Health project (Thai/Lao and Thai/Cambodian border) at the Ministry of Public Health of Thailand in Bangkok on October 5, 2006.
- Coordinated with Dr. Saowanit Vijaykadga, Technical Officer in the Malaria Cluster (Bureau of Vector-Borne Diseases-BVBD), MOPH Thailand regarding current and future drug quality monitoring activities by the BVBD. Went on a 2-day field trip in Kanchanaburi Province, Thailand on November





20-21 to meet with staff involved in sampling and basic testing of anti-malarials.

- Assisted Mahidol University with the procurement of a water purification system (identifying and contacting suppliers, assisting with requests for quotations, regular follow-up). Three quotations have been obtained.
- Assisted the USP laboratory with the procurement of primaquine samples from GPO Thailand for monograph development.
- Participated in a preparation meeting at the Thai FDA of the Cross-Border Health Meeting on Food Safety and Hygiene and Counterfeit Medicines in Phnom Penh, on December 13-14, 2006.
- Participated in the Inter-Ministerial Meeting in Phnom Penh, Cambodia on October 9-10, 2006.
- Participated in a workshop entitled “*Review of The Recent Malaria Control Program Strategy in Thailand and Recommendations for a New Five-Year Strategy*”, organized by the Ministry of Public Health, during 4-6 November 2006, at the Orchid Hotel in Chiang Mai Province.
- Participated in the USAID *Regional Partners Malaria Strategy Review and Planning Workshop* during November 7-8 2006, at the Orchid Hotel in Chiang Mai Province.
- Presented a poster at the 38<sup>th</sup> Annual Conference the Asia Pacific Academic Consortium for Public Health (APACPH) in Bangkok on December 5 2006, regarding the following subject: “*Factors Affecting Prescribing of Anti-malaria Drugs for the Treatment of Uncomplicated Malaria Falciparum in Public Health Facilities in Kanchanaburi Province.*” (*Research Paper as partial requirement of Master Degree in Public Health, Mahidol University*).
- Assisted Abdelkarim Smine with a technical visit to Cambodia between December 5-13, 2006 to meet with the USAID Mission, FDD, NLDQC, CNM and the GFATM. Conducted a 2-day field visit to Battambang Province to collect basic information for the planned anti-malarial drug quality along the Thai-Cambodia border in 2007.
- Coordinated with MEDiCAM and WHO in Cambodia regarding USP DQI’s presentation on Counterfeit Medicines at the 4Ms meeting in Phnom Penh, Cambodia on January 19<sup>th</sup>, 2007.



## **Environmental Support Program**

### **Sustainable Enterprise Initiative**

The Sustainable Enterprise Initiative was funded by USAID under the US-Asia Environmental Partnership (USAEP) program to help Thai business schools develop research, curricula and teaching materials that would incorporate environmental awareness and environmental management skills in their MBA programs and executive education programs. The initiative's final activity was concluded in this quarter. Thammasat University's Faculty of Commerce and Accountancy organized its 2<sup>nd</sup> industry advisory board meeting and presented 3 case studies and 2 research papers at Royal Princess Hotel, Bangkok on December 7, 2006. More than 50 attendees from universities, government agencies and business sectors participated in the meeting.

Final expenditures, accounting and reporting will be completed in the second quarter of FY2007 to complete the program.

### **Enhanced Municipal Manager Training Program**

The Enhanced Municipal Manager Training Program was funded by USAID to follow-up on an earlier program to develop materials and training programs that would help municipal managers develop the processes and skills to better manage municipal projects – especially water, wastewater and solid waste projects. The key Thai partner in this effort is King Prajadhipok's Institute (KPI). The only activity in the past quarter was the completion of King Prajadhipok's Institute's citizen survey protocol and manual in the Thai language. This material is ready for use by working group members in Chiang Mai, Udonthani, Khonkaen, Nonthaburi, Pakkred, Rangsit and other Thai cities.



## Project Matrices

Note: Project information on types of activities now completed – SME consulting, bank training, business support organization partnerships, regulatory dialogue and education – can be found in matrices in previous reports.

### Avian and Pandemic Influenza Projects

Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
AGRISOURCE: Building Partnerships for the Prevention and Control of Avian Influenza and Pandemic Influenza (PAI) in Thailand	The alliance, lead by AgriSource, will utilize untapped resources from more than 17 agribusiness and media organizations to communicate with and change behavior among agricultural workers, backyard poultry producers, and other at-risk individuals in rural communities. They will deliver messages to these target groups through three integrated channels (media, workplace education, and information toolkits) and related primary activities.	The goal is to reach out to poultry industry workers, backyard producers, and other at-risk individuals in rural communities, focusing on behavior change and communications related to animal and human health.	AgriSource, Internews, ICDC,	The proposal is in the process of being modified. The agreement is anticipated to be signed by Feb 2007.
INFLUENZA FOUNDATION THAILAND: Proposal for Activities on Influenza Pandemic Preparedness for the Private Sector and General Public in Thailand	Influenza Foundation Thailand (IFT) and partners will implement the Influenza Pandemic Preparedness program to prepare for an influenza pandemic in Thailand. The program will develop a handbook to serve as a guideline for pandemic preparedness planning for business that includes risk management and business continuity planning (BCP) using participatory methods to adapt international practices into a Thai context. The program partners will also develop a Flu Information Pamphlet to give workers basic information on pandemic influenza. The alliance partners will organize and host capacity building workshops for private sector organizations that offer concrete advice on how to write BCPs. Finally, the alliance partners will launch a communications program on influenza for the general public	<ul style="list-style-type: none"> <li>• To increase understanding of the risks of an influenza pandemic among strategic sectors of the economy, including small and medium-sized enterprises, public utilities, and the banking sector.</li> <li>• To facilitate and support pandemic preparedness planning for strategic sectors of the economy through the participatory development of sector-specific guidelines.</li> <li>• To give pandemic influenza planning knowledge to the private sector</li> <li>• To increase the general public's knowledge of influenza prevention and control.</li> </ul>	Roche, Sanofi, Esso, IFT	Proposal is in the process of modification and refinement. It is expected to be submitted in its final form in January 2007.



AVSF -“Strengthening the Capacity of Veterinarians and Poultry Farmers to Control Avian Influenza Outbreaks in Viet Nam	The project will consist of five primary components that include avian influenza diagnosis, avian influenza epidemiology, animal health information system, bio-safety and safe poultry production, and wide scale dissemination of materials and results. . Specifically, the project will build capacities in the detection of avian influenza and its epidemiology as well as in the animal health information system. In addition, the project will use the distribution networks of provincial veterinary sub-departments and the sales forces networks of private agriculture companies to disseminate key avian influenza messages and materials.	<ul style="list-style-type: none"> <li>• Build the capacity of public and private veterinarians to conduct clinical and laboratory diagnosis including the use of rapid tests such as Flu-Detect.</li> <li>• Build the capacity of public and private veterinarians to use epidemiological data to manage AI outbreaks.</li> <li>• Upgrade the Animal Health Information System including regular disease reports and monthly veterinary bulletins featuring avian influenza news.</li> <li>• Increase the number of small to mid sized poultry farmers who implement bio-safety and poultry handling measures.</li> </ul>	AVSF, Pfizer, Dept. Animal Health	First Agreement signed and funds transferred. A second award for 45,000USD was awarded. The proposal is under revision and will be submitted by Feb. 2007.
AFAP: Targeting Avian Influenza in Hoa Binh and Surrounding Provinces	This project will work with 4,000 local paravets, poultry farmers and community members, as well as district level government staff, to strengthen capacity in poultry biosecurity and detection, diagnosis, monitoring and control of AI. Additionally, this project will secure the input from private sector livestock companies and work with them to foster an engagement in AI prevention between community and government resources and the private sector.	<ul style="list-style-type: none"> <li>• To strengthen the local, district and provincial capacity in poultry bio security and in the detection, diagnosis, monitoring and control of AI outbreaks.</li> <li>• To facilitate coordinated private sector engagement in AI prevention and control strategies in Hoa Binh and surrounding provinces.</li> </ul>	1. AFAP 2. Hai Nguyen Company, 3. Thanh Tho Company 4. Luong Son District Vet Station, 5. Luong Son District Peoples Committee	Oct-Dec 2006: Agreement was approved by USAID and sent to AFAP for a signature.



CRS: “Ensuring Safe and Sustainable Small-Scale Poultry and Livestock Raising Among Vulnerable Communities in Viet Nam”	Community AI Information, Education and Communication, Strengthened AI skills and knowledge of local extension staff, Bio-secure livestock practices among vulnerable families, Community based, participatory surveillance and early warning structures, Links with livelihoods alternatives.	<ul style="list-style-type: none"> <li>• To promote alternative livelihoods as one method of the expansion of opportunities to vulnerable families to diversify their livelihoods, further reducing threats arising from poultry production.</li> <li>• Local governance structures of target communities organize participatory early warning (surveillance, detection, reporting) mechanisms on AI and other infectious animal diseases.</li> <li>• The knowledge and skills of target local extension personnel in the management of infectious animal diseases, especially AI, is strengthened.</li> <li>• The poultry rearing practices of targeted rural communities are more bio-secure.</li> </ul>	Provincial Peoples’ Committees in both provinces, including the Coordinating Committees, the Departments of Agriculture and Rural Development, and the Provincial Veterinary Offices. District level People’s Committees Son Hao Ltd Co for Construction and Livestock/Poultry development, Ho Viet Linh Farm, Hai Hao Livestock co-operative, and Thanh Hoa Joint Stock Company for Seeds and Poultry Development.	Oct-Dec 2006: Agreement was approved by USAID and sent to CRS for a signature.
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## Malaria Projects

### BAAM Projects Approved for Funding

Small Grants				
Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
The Study of Antimalarial Drug Use Practice in Thailand / <i>Surveillance of MDR Malaria</i>	<p>This activity consists of phase I, problem identification. Initial data collection will take place on the eastern border of Thailand with Cambodia. Since a study took place in Cambodia in October 2002, there may be a comparison of information across the border with Cambodian colleagues to identify potential areas of collaboration and joint approaches. It is anticipated that once the approach is developed for eastern Thailand, it will be adapted to the specific local conditions in other border regions, such as on the Thai-Burmese border, and that those areas will also be surveyed.</p> <p>The overall objective of this activity is to enhance the capacity of national and local counterparts to systematically identify and monitor community-level drug management practices and use and disseminate this information to develop policy and programmatic interventions.</p>	<p>Specific Objectives:</p> <ol style="list-style-type: none"> <li>1. Develop a Thailand-specific assessment and monitoring tool, which can be applied in border areas in Thailand</li> <li>2. Develop the capacity to adapt the tool to local circumstances and apply it in selected areas</li> <li>3. Analyze the findings to identify key drug use problems that may require additional exploration</li> </ol>	<ul style="list-style-type: none"> <li>• Bureau of Vector Borne Disease (Sub-Grantee)</li> <li>• Chantaburi Provincial Public Health Office</li> <li>• Office of Disease Control Chonburi</li> <li>• Management sciences for Health</li> </ul> <p>Chantaburi Province Vector-borne Disease Control Center, Vector-borne Disease Control Units in Pong Nam Ron and Soi Dao Districts</p>	<p>Data collection is completed and final analysis is underway.</p> <p>Preparations are underway to expand coverage to the Thai-Burma border at sentinel surveillance sites in Mae Hong Son and Tak Provinces.</p>



BAAM Projects Approved for Funding

Large Grants

Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
Strengthening of Sentinel Surveillance System for Anti-malarial Drug Resistance in Thailand / <b>Surveillance of MDR Malaria</b>	<p>With the Malaria Group of the Bureau of Vector-Borne Diseases (MOPH) as focal point, the ADR surveillance network comprises malaria clinics under responsibility of regional Vector Borne Disease Control Offices 1-5, provincial and district community hospitals, and academic field research stations. Nine border provinces with high malaria incidence are selected as sentinel sites, <i>i.e.</i>, Chiang Mai, Mae Hong Son, Tak, Kanchanaburi, Ranong, Ratchaburi, Ubon Ratchathani, Chanthaburi, and Trat. Main activities are:</p> <ol style="list-style-type: none"> <li>1. Training on <i>in vivo</i> therapeutic efficacy assessment and <i>in vitro</i> sensitivity study;</li> <li>2. <i>In vivo</i> therapeutic efficacy assessment of the first line treatment regimens;</li> <li>3. <i>In vitro</i> sensitivity study of the currently used anti-malarial drugs;</li> <li>4. Establishment of an information center for ADR network at the Malaria Division.</li> </ol>	<ol style="list-style-type: none"> <li>1. To establish a network of sentinel surveillance sites for monitoring anti-malarial drug resistance in Thailand</li> <li>2. To study the current situation of anti-malarial drugs in Thailand both <i>in vivo</i> and <i>in vitro</i> and including using HRP2 drug sensitivity assay</li> <li>3. To strengthen the cooperation among sentinel sites in country and among neighboring countries towards sharing anti-malarial drug resistance information</li> </ol>	<ol style="list-style-type: none"> <li>1. The Malaria Group, Bureau of Vector-Borne Diseases</li> <li>2. Provincial and district hospitals</li> <li>3. Mahidol University</li> <li>4. Siriraja Hospital</li> <li>5. Thammasat University</li> <li>6. The Royal Thai Armed Forces Research Institute for Medical Science</li> <li>7. WHO</li> </ol>	<p>Initial and refresher training completed; sentinel surveillance by <i>in vivo</i> therapeutic efficacy study, <i>in vitro</i> sensitivity study, and HRP2 assay of the currently used anti-malarial drugs is on-going in 9 sentinel sites.</p> <p>Results of monitoring drug resistance in were analyzed at national technical workshops in 2002, 2003, 2004, 2005. Revised standard treatment regimen has been finalized. The national malaria drug policy committee has revised manuals on treatment guidelines for physicians and health workers; mefloquine-artesunate combination therapy is now used nation-wide since October 2004.</p>





*BAAM Projects Approved for Funding*

*Large Grants*

<b>Project Name / Objective</b>	<b>Description</b>	<b>Objectives/ Outcomes</b>	<b>Partners</b>	<b>Status</b>
Community-Based Malaria Control Along the Thai-Cambodia Border Through Civic Partnerships in Chantaburi and Trat Provinces / <b><i>Health System Reform –Decentralized Response Strategies and Effective Partnership Models</i></b>	The main concept of the project is to strengthen community involvement in malaria control and toward self-reliance in the long run through the process of standardized method of working for prevention, cure, and control, by community-based work to improve the potential of community and local agencies to address the malaria problem by themselves with support by related health personnel and other multi-disciplinary teams.	<ol style="list-style-type: none"> <li>1) To initiate malaria epidemiology information center in the community.</li> <li>2) To improve prevention in high-risk groups.</li> <li>3) To promote community participation in solving problem of prevention in high-risk groups, and promote use of dipstick test for early diagnosis.</li> <li>4) To promote community participation to address malaria with support by government organizations</li> <li>5) To build capacity of health personnel and volunteers, including health personnel from Cambodia border areas if requested to create a network for disease control by communities themselves in the long run.</li> </ol>	<ul style="list-style-type: none"> <li>• MOPH, VBDC, VDDUs</li> <li>• Chantaburi and Trat Provincial Public Health Offices</li> <li>• District Health Offices and Health Centers</li> <li>• Schools</li> <li>• High-risk groups</li> <li>• Village health volunteers</li> <li>• Government agencies</li> <li>• Community leaders</li> </ul>	<p>Orientation workshops on conducted, community civil-society forums on malaria problem, analysis, and action planning conducted in Chantaburi and Trat Provinces.</p> <p>Training on GIS for malaria control conducted in Chantaburi.</p> <p>Workshop conducted on community epidemiology for multi-sectoral local malaria control core participants in Trat Province, and training held on improved diagnosis and treatment of malaria in Trat Province.</p> <p>Community malaria core teams established and trained; stakeholder awareness and planning sessions conducted for community-based control projects; community malaria information centers established.</p>



BAAM Projects Approved for Funding

Large Grants

Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
Developing and producing dipstick dye immunoassays utilizing dye particle-linked monoclonal antibodies developed against pLDH and pGAPDH for malaria antigen detection / <b>Increased Access to Rapid Parasitological Diagnosis and Effective Treatment</b>	<p>Preparing and purifying pLDH and pGAPDH for raising monoclonal antibodies, followed by research and development to determine the feasibility of local production of dipstick dye immunoassays utilizing dye particle-linked monoclonal antibodies developed against pLDH and pGAPDH for malaria antigen detection of both P. falciparum and non-P. falciparum.</p> <p>General objective: To locally produce a rapid, simplified, reliable and maximized sensitivity dipstick dye immunoassay utilizing dye particle-linked monoclonal antibody against pLDH and pGAPDH for detecting malaria antigens of falciparum and non-falciparum malaria in human blood by using our national resources.</p>	<ol style="list-style-type: none"> <li>1. To raise/characterize MABs against pLDH and pGAPDH, maximize test sensitivity, genetic diversity to the P. f. parasite population, and not react to non-malaria antigen.</li> <li>2. To develop a rapid, simplified, sensitive, and specific dipstick assay to detect asexual erythrocytic stage of P.f. and non-P.f.</li> <li>3. To increase sensitivity, aiming at 100% for densities of &gt;100 parasites per µl blood in four species.</li> <li>4. To improve readability of tests (better signal intensity &amp; avoidance of mix-ups).</li> <li>5. To evaluate relative sensitivity/specificity of the antigen detection dipstick method for P. f. malaria field diagnosis compared to microscopy.</li> <li>6. To set up a quality control system for sensitivity and specificity.</li> </ol>	<ol style="list-style-type: none"> <li>1. The Bureau of Vector-Borne Diseases, Department of Disease Control, MOPH</li> <li>2. National Institute of Health, Department of Medical Sciences, MOPH</li> </ol>	Cloning and expression of pLDH in <i>E. coli</i> by genetic engineering obtained expressed fusion protein. By affinity purification, the protein obtained had high purity and good yield, and these proteins show the pLDH enzyme activity; Pre-immunized sera of rabbits were determined for the reactivity with pLDH and GST proteins by western blot analysis. Reactivity of the immunize sera was characterized by western blot analysis, followed by standardization of ELISA assay, determination of appropriate blocking solution in ELISA assay, and titration of polysera,. 4 LDH and 4 GAPDH clones with an acceptable level of response have been produced for use by NIH on the prototype dipstick.



BAAM Projects Approved for Funding

Large Grants

Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
Partnerships for a School-based Approach to Community Action Against Malaria / <i>Effective Partnership Models</i>	<p>The project builds partnerships to develop a model for a school-based approach to community action against malaria as a strategy for developing knowledge, attitudes, skills and behavior necessary for community-based self-reliant action against malaria in highly endemic border. The model comprises the following key elements:</p> <ul style="list-style-type: none"> <li>• A process for participatory learning and action against malaria by the school and community;</li> <li>• Use of case study approach on a whole school basis to study the local malaria situation and identify alternative solutions;</li> <li>• Use of life skills education methods to enhance the case study approach and develop/change behavior to prevent and reduce malaria;</li> <li>• Development of learning materials to support discovery learning;</li> <li>• Mobilization of communities for self-reliant action against malaria;</li> <li>• Technical support to schools and communities;</li> <li>• Leveraging resources from local sub-district councils to support community malaria prevention and control plans and projects</li> </ul> <p>Phase II (replication trials) began in October 2002 with expansion to include 40 schools in Tak, Mae Hong Son, Chiang Mai, Chantaburi, and Trat Provinces.</p>	<ol style="list-style-type: none"> <li>1. To strengthen capacity of schools and teachers to facilitate participatory learning and action by students and communities to prevent and control malaria.</li> <li>2. To raise awareness and mobilize community action to prevent and control malaria.</li> <li>3. To set up an example of a working model with multi-sectoral organizations collaborating as equal stakeholders.</li> <li>4. To build on lessons learned and best practices for expansion of coverage to other endemic border areas facing increasingly multi-drug resistant malaria.</li> </ol>	<ul style="list-style-type: none"> <li>• Ministry of Education - Office of National Primary Education Commission: Office of Special Projects, Office of Supervision and Standards, Offices Provincial Primary Education Commissions in Tak, Mae Hong Son, Chiang Mai, Chantaburi, Trat</li> <li>• Health Behavior Development Group, Malaria Division</li> <li>• Regional Disease Control Offices, Vector Borne Disease Control Centers and Units</li> <li>• The Life Skills Development Foundation</li> <li>• Rajabhat Institute Chiang Mai</li> <li>• Border Patrol Police Bureau</li> </ul>	<p>Phase I (model-building): 200 teachers, principals, education supervisors from 25 schools in 4 districts received 25 days of training in 5 workshops. Students completed community malaria situation assessments, analyzed alternatives, and shared with community leaders in consultation workshops to reach consensus on action plans and projects. Community-generated malaria control projects received funding support. A participatory process evaluation was conducted in August 2002. Phase II: 109 grade 4-9 teachers/ supervisors from 15 expansion schools received 15 days training, conducted surveys of health problems, malaria KAP, analysis of community malaria situation and alternatives for action. Phase III: 230 grade 4-9 teachers from 46 expansion schools received 7 days training on revised curriculum on mosquito-borne diseases.</p>



BAAM Projects Approved for Funding

Small Grants				
Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
Thailand Roll Back Malaria Strategic Planning Workshop / <i>Effective Partnership Models</i>	<p>BAAM Project Coordinating Unit organized a multi-agency gathering of key stakeholders in malaria control. Working group sessions were held to obtain input on key strategies for renewed joint efforts to control malaria with special focus on border areas and multi-drug resistant malaria. Deliberations focused on the following thematic areas:</p> <ul style="list-style-type: none"> <li>• Diagnosis, treatment, case management</li> <li>• Community/household prevention</li> <li>• Epidemiology, surveillance, mapping, GIS</li> <li>• Decentralization, health system reform, responsibilities, and processes for community participation</li> <li>• Staff capacity building and training methodologies</li> <li>• Participatory learning processes, and prototypes for action in target communities</li> <li>• International organizations/agencies and their contribution to Thailand Roll Back Malaria</li> </ul> <p>The thematic working groups presented results of their discussions in the form of recommended strategies, activities, support needed, and potential partner agencies for comments and plenary discussion.</p>	<ol style="list-style-type: none"> <li>1. To seek approaches and mechanisms for mutual cooperation for more successful malaria control.</li> <li>2. To provide an opportunity for all stakeholders to present experience and share ideas to move toward formulation of key joint strategies for collaboration in systematically advancing as appropriate and necessary.</li> </ol>	<ul style="list-style-type: none"> <li>• MOPH</li> <li>• Mahidol University</li> <li>• Thai and US AFRIMS</li> <li>• Royal Project Bureau</li> <li>• Royal Thai Army</li> <li>• Border Patrol Police</li> <li>• Hilltribe Welfare Division, Ministry of Labor and Social Welfare</li> <li>• Office of the National Economic and Social Development Board</li> <li>• Office of the National Primary Education Commission</li> <li>• The Life Skills Dev. Foundation</li> <li>• IMPECT</li> <li>• IRC</li> <li>• ACTMalaria</li> <li>• MSF</li> <li>• PATH Canada</li> <li>• UNICEF</li> <li>• WHO</li> <li>• USAID</li> </ul>	<p>Workshop completed in July 2000. Participants from the wide range of organizations involved in anti-malaria efforts in Thailand were able to achieve a considerable degree of consensus on four principal strategies for rolling back malaria in Thailand.</p> <ol style="list-style-type: none"> <li>1. Surveillance and response: epidemic preparedness, prevention and control</li> <li>2. Early diagnosis, prompt and effective treatment</li> <li>3. Household and community prevention</li> <li>4. Health system reform to support local self-reliance in malaria control</li> <li>5. Collaboration and coordination with equal partnerships among local implementing agencies</li> </ol> <p>Program strategies, operational strategies, and potential partner agencies were compiled into a national strategic framework for Roll Back Malaria in Thailand.</p>



BAAM Projects Approved for Funding

Small Grants				
Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
Participatory action research planning workshop in Chantaburi Province / <i>Effective Partnership Models</i>	Following on focus group discussions conducted with more than 200 malaria high-risk villagers in Chantaburi Province, MOPH Vector Borne Disease Control Office No. 5 organized a planning workshop with local government officials, informal employers and high-risk forest-related occupation groups from Pong Nam Ron and Soi Dao Districts. Working groups provided input into formulation of proposals for subgrants to support development of appropriate interventions for a community-based approach to malaria control in Thai-Cambodian border areas.	<ol style="list-style-type: none"> <li>1. To review results of focus group discussions with malaria high-risk groups.</li> <li>2. To generate input on interventions emphasizing self-reliance.</li> <li>3. To identify collaborating partners and their potential roles.</li> </ol>	<ul style="list-style-type: none"> <li>• MOPH VBDONo. 5, VBDC, VDDUs</li> <li>• Chantaburi Provincial Public Health Office</li> <li>• District Health Offices and Health Centers</li> <li>• Border Patrol Police</li> <li>• Royal Thai Marines</li> <li>• Principals and teachers</li> <li>• Informal employers</li> <li>• High-risk groups</li> <li>• Village health vols.</li> </ul>	Workshop completed in August 2001. Input used to formulate action research proposal planned for funding in FY 2002. Implementation underway on community-level epidemiology system using GIS and community awareness raising interventions.
Participatory action research planning workshops in Trat Province / <i>Effective Partnership Models</i>	MOPH Vector Borne Disease Control Office No. 5 organized two planning workshops in Trat Province, with local government officials, informal employers, subdistrict council members, and high-risk groups from Bo Rai, Muang, and Klong Yai Districts. Working groups provided input into proposals for subgrants to support development of appropriate interventions for a community-based approach to malaria control in Thai-Cambodian border areas. These workshops were followed by consultations with key officials of Vector Borne Disease Control Office No. 5 on formulating a proposal for subgrant support from BAAM.	<ol style="list-style-type: none"> <li>4. To review results of focus group discussions with malaria high-risk groups.</li> <li>5. To generate input on interventions emphasizing self-reliance.</li> <li>6. To identify collaborating partners and their potential roles.</li> </ol>	<ul style="list-style-type: none"> <li>• , MOPH VBDO No. 5, VBDC, VDDUs</li> <li>• Chantaburi Provincial Public Health Office</li> <li>• District Health Offices and Health Centers</li> <li>• Border Patrol Police</li> <li>• Royal Thai Army and Marines</li> <li>• School Principals and teachers</li> <li>• Informal employers</li> <li>• High-risk groups</li> <li>• Village health vols.</li> </ul>	Workshops completed in November 2001. Input used to formulate action research proposal planned for funding in FY 2002. Implementation underway on community-level epidemiology system and community awareness raising interventions.



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Small Grants				
Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
USAID Roll Back Malaria Partners' Meeting: Informal Consultation on Monitoring Anti-malarial Drug Quality and Use Practices / <b><i>Surveillance of MDR Malaria</i></b>	BAAM Project Coordinating Unit organized a series of meetings from September 12-14, 2001 for consultations on monitoring drug quality and use practices among representatives of USAID Roll Back Malaria partners in Thailand, Cambodia, the U.S.A, and WHO.	<ol style="list-style-type: none"> <li>1. To identify important issues related to drug quality control and drug use practices in border areas;</li> <li>2. To identify priority actions needed to initiate study and monitoring of drug quality and use practices as components of sentinel surveillance;</li> <li>3. To identify potential implementing actors in study and monitoring of drug quality and use practices;</li> <li>4. To identify opportunities for technical cooperation, and support needed to implement study and monitoring of drug quality and use practices.</li> </ol>	<ul style="list-style-type: none"> <li>• USAID</li> <li>• WHO</li> <li>• Royal Thai Government Ministry of Public Health</li> <li>• Cambodian Ministry of Health</li> <li>• US Pharmacopeia</li> <li>• Management Sciences for Health</li> <li>• ACTMalaria</li> <li>• KIAAsia - BAAM PCU</li> </ul>	The consultation meetings are completed. The consultations resulted in identification of important issues and priority actions needed to initiate/implement study and monitoring of drug quality and drug use practices as integral components of sentinel surveillance of anti-malarial drug resistance with a focus on Thailand and Cambodia.
Training of village health/malaria volunteers and sub-district council members / <b><i>Health System Reform – Decentralized Response Strategies and Effective Partnership Models</i></b>	BAAM Project Coordinating Unit collaborated with VBDO Nos. 1 and 2 to organize 2 training workshops for village health/malaria volunteers and sub-district council members on in-depth community malaria situation analysis; prevention, control and treatment of malaria; and coordinating planning for community action against malaria.	<ol style="list-style-type: none"> <li>1. To increase knowledge, attitudes and behavior related to malaria.</li> <li>2. To understand analysis of risk and community malaria epidemiological situation.</li> <li>3. To prepare for collaboration with schools in analyzing alternative actions and formulating community malaria action plans.</li> </ol>	<ul style="list-style-type: none"> <li>• VBDO No. 1 and 2, VBDCs and VBDUs</li> <li>• Village health/malaria volunteers</li> <li>• Sub-district council members</li> <li>• Provincial Primary Education Offices</li> <li>• The Life Skills Development Foundation</li> <li>• BAAM PCU</li> </ul>	Training workshops were completed in February 2002. Volunteers and sub-district council members from communities served by 25 schools in 4 districts have increased knowledge about malaria, situation/risk analysis, and are prepared to collaborate in school-community malaria action planning workshops in July 2002.



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Small Grants				
Project Name / Objective	Description	Objectives/ Outcomes	Partners	Status
Write shop to summarize one year implementation of the Partnerships for a School-based Approach to Community Action Against Malaria Project / <b><i>Effective Partnership Models</i></b>	BAAM Project Coordinating Unit collaborated with the Special Projects Office of the Office of the National Primary Education Commission to organize a write shop to summarize implementation at the whole-school level and at each grade level from kindergarten to grade 9 under the Partnerships for a School-based Approach to Community Action Against Malaria Project.	1. To summarize results of first year implementation including learning processes, curriculum linkages, and teaching plans.	<ul style="list-style-type: none"> <li>• Special Projects Office of the Office of the National Primary Education Commission</li> <li>• Provincial and District Offices of Primary Education</li> <li>• The Life Skills Development Foundation</li> <li>• BAAM PCU</li> </ul>	Writesops completed in April 2002, 2003, 2004. Representatives of 40 schools in 4 provinces summarized implementation, learning processes, content, life skills, problems & solutions, results, benefits.
Transfer of technology training on preparing and purifying pLDH and pGAPDH for raising monoclonal antibodies / <b><i>Increased Access to Rapid Parasitological Diagnosis and Effective Treatment</i></b>	Dr. Pongwit Bualombai of the Malaria Division was sent to the University of Manchester to participate in a short training course on preparing and purifying pLDH and pGAPDH for raising monoclonal antibodies. If this is successful, it will be followed by research and development to determine the feasibility of local production of dipstick dye immunoassays utilizing dye particle-linked monoclonal antibodies developed against pLDH and pGAPDH for malaria antigen detection of both <i>P. falciparum</i> and non- <i>P. falciparum</i> .	1. Transfer of technology on preparing and purifying pLDH and pGAPDH for raising monoclonal antibodies	<ul style="list-style-type: none"> <li>• Malaria Division, Department of Communicable Disease Control, MOPH</li> <li>• National Institute of Health, Department of Medical Sciences, MOPH</li> </ul>	Dr. Pongwit Bualombai is undergoing training at the Department of Molecular Biology, University of Manchester, and will return in July.

